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EXAMINER
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DODDS, HAROLD E

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,885

Applicant(s)

SESHADRI ET AL.

Examiner

Harold E. Dodds, Jr.

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/19/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5-16, 18, 21, and 23-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Knutson et al. (U.S. Patent No. 5,870,746).

3. Knutson anticipates independent claim 1 by the following:

“...a data storage component...” at col. 7, lines 53-54.

“...a plurality of folders comprising links to particular data files stored in the data storage component...” at col. 8, lines 1-6, col. 44, lines 13-14, col. 36, lines 30-32, and col. 7, lines 53-54.

“...the content of the folders being controlled at least in part...” at col. 43, lines 466-67, col. 8, lines 1-8, and col. 45, lines 30-31.

“...by end-user specified preferences...” at col. 62, lines 36-37 and col. 8, lines 11-13.

“...wherein folders include any type of link collection defined by a set of relationships...” at col. 8, lines 1-6, col. 44, lines 13-14, and col. 12, lines 58-63.

4. As per claim 18, the "...a data storage component..." is taught by Knutson at col. 7, lines 53-54, the "...plurality of data containers storing pointers to sections of data..." is taught by Knutson at col. 12, lines 9-12, col. 28, lines 63-67, and col. 62, lines 26-28, the "...stored on the data storage component..." is taught by Knutson at col. 7, lines 53-54, and the "...content of the data containers being controlled by end-user programs..." is taught by Knutson at col. 43, lines 66-67, col. 12, lines 9-12, col. 45, lines 30-31, and col. 6, lines 56-59.

5. As per claim 2, the "...data storage component storing schematized data..." is taught by Knutson at col. 7, lines 53-54 and col. 7, lines 11-13.

6. As per claim 5, the "...preferences are constructed automatically based on inferences..." is taught by Knutson at col. 8, lines 11-13, col. 20, lines 19-21, and col. 30, lines 55-58 and the "...made from user activity..." is taught by Knutson at col. 7, lines 2-4 and col. 6, lines 51-55.

7. As per claim 6, the "...wherein preferences specify a plurality of conditions and actions..." is taught by Knutson at col. 8, lines 11-13, col. 7, lines 16-19, and col. 22, lines 22-31.

8. As per claim 7, the "...one of the conditions relates to user context..." is taught by Knutson at col. 7, lines 16-19 and col. 5, lines 25-27.

For claim 7, the term "background" is used to suggest the term context".

9. As per claim 8, the "...preferences being specified in accordance with a developer specified schema...", is taught by Knutson at col. 8, lines 11-13, col. 5, lines 56-59, col. 3, lines 48-53, and col. 7, lines 11-13.

For claim 8, the term "analyst" is used to suggest the term "developer".

10. As per claim 9, the "...preferences and schema being stored in tables in the data storage component...", is taught by Knutson at col. 8, lines 11-13, col. 7, lines 11-13, col. 13, lines 8-9, and col. 7, lines 53-54.

11. As per claim 10, the "...wherein preferences are evaluated upon the occurrence of an event...", is taught by Knutson at col. 8, lines 11-13, col. 51, lines 18-19, and col. 44, lines 62-64.

12. As per claim 11, the "...preferences are evaluated in a set oriented fashion utilizing a query language...", is taught by Knutson at col. 8, lines 11-163, col. 51, lines 18-19, and col. 6, lines 32-36.

13. As per claim 12, the "...one or more actions are executed in accordance with a preference...", is taught by Knutson at col. 22, lines 22-31, col. 40, lines 63-65, and col. 8, lines 11-13  
and the "...when the preference conditions are satisfied...", is taught by Knutson at col. 8, lines 11-13 and col. 61, col. 17-19.

14. As per claim 13, the "...action comprises creating a link in a folder...", is taught by Knutson at col. 22, lines 22-31, col. 7, lines 11-13, col. 44, lines 13-14, and col. 8, lines 1-6.

15. As per claim 14, the "...action comprises excluding a link from a folder..." is taught by Knutson at col. 22, lines 22-31, col. 32, lines 15-17, col. 44, lines 13-14, and col. 8, lines 1-6.

For claim 14, the term "remove" is used to suggest the term "exclude".

16. As per claim 15, the "...action comprises deleting a link in one folder..." is taught by Knutson at col. 22, lines 22-31, col. 32, lines 15-17, col. 44, lines 13-14, and col. 8, lines 1-6

and the "...and recreating a link in another folder..." is taught by Knutson at col. 7, lines 11-13, col. 44, lines 13-14, and col. 8, lines 1-6.

17. As per claims 16 and 26, the "...action comprises notifying the user..." is taught by Knutson at col. 22, lines 22-31 and col. 3, lines 38-39.

18. As per claim 21, the "...end-user programs are composed using a graphical user interface..." is taught by Knutson at col. 6, lines 56-59, col. 41, lines 66-67, and col. 5, lines 56-59.

For claim 21, the term "written" is used to suggest the term "composed".

19. As per claim 23, the "...end-user programs utilize historical information in stored in a data container..." is taught by Knutson at col. 6, lines 56-59, col. 6, lines 51-55, and col. 12, lines 10-12.

20. As per claim 24, the "...execution of the end-user program..." is taught by Knutson at col. 40, lines 63-65 and col. 6, lines 56-59

and the "...comprises executing a query on structured data to produce a result table...", is taught by Knutson at col. 40, lines 63-65, col. 8, lines 42-43, col. 39, lines 24-26, and col. 6, lines 11-14.

21. As per claim 25, the "...one or more actions are taken based on the data in the result table...", is taught by Knutson at col. 22, lines 22-31 and col. 6, lines 11-14.

22. As per claim 27, the "...action includes adding a pointer to a data container...", is taught by Knutson at col. 22, lines 22-31, col. 7, lines 63-67, col. 28, lines 63-67, and col. 12, lines 9-12.

23. As per claim 28, the "...action includes removing a pointer from a data container...", is taught by Knutson at col. 22, lines 22-31, col. 32, lines 15-17, col. 28, lines 63-67, and col. 12, lines 9-12.

### ***Claim Rejections - 35 USC § 103***

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

25. Claims 3 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Knutson as applied to claim 1 above, and further in view of Bailey ("On-Event-Condition-Action Language for XML").

As per claim 3, the "...preferences are specified...", is taught by Knutson at col. 8, lines 11-13, but the "...using a plurality of ON (event) IF (condition) THEN (action) statements..." and the "...and one or more Boolean operators...", are not taught by Knutson.

However, Bailey teaches the use of on event if condition then action statements and the use of Boolean operators as follows"

"...On event if condition do actions. Rather than introducing yet another query language for XML, we use the XPath [32] and XQuery [33] languages to specify events, conditions and actions within our ECA rules. XPath is used in a number of W3C recommendations, such as XPointer, XSLT and XQuery itself, for selecting and matching parts of XML documents and so is well-suited to the requirements of ECA rules. XQuery is used in our ECA rules only where there is a need to be able to construct new fragments of XML. We define each of the components of our ECA rule language below, give some example rules, and describe the rule execution semantics..." at sec. 2.

"...The condition part of an ECA rule is either the constant TRUE, or one or more simple XPath expressions connected by the boolean connectives and, or, not..." at section 2.2.

It would have been obvious to one of ordinary skill at the time of the invention to combine Bailey with Knutson to use "on event if condition do actions" syntax and Boolean operators in order to use commonly accepted software systems and gain



greater acceptance from potential users. Knutson and Bailey have related applications. They teach the use of computers, the use of databases, the use of networks, the use of markup languages, the use of schema, the use of pointers, and the use of relationships. Knutson provides data stores, folders, links, relationships, and preferences and Bailey provides "on event if condition do actions" syntax and Boolean operators.

26. As per claim 4, the "...preferences are specified utilizing a graphical user interface..." is taught by Knutson at col. 8, lines 11-13 and col. 5, lines 56-59.

27. Claims 17 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knutson as applied to claims 1 and 18 above respectively, and further in view of Ku et al. (U.S. Patent No. 6,532,471).

As per claim 17, the "...preferences..." is taught by Knutson at col. 8, lines 11-13,  
the "...such that the can be dragged, dropped..." is taught by Knutson at col. 21, lines 20-23,  
the "...amongst folders..." is taught by Knutson at col. 8, lines 1-6,  
but the "...are manifested as physical entities..."  
and the "...cut, and pasted..." are not taught by Knutson.

However, Ku teaches the cutting and pasting of physical entities as follows:

"...Objects are actually abstractions of physical entities or conceptual items..." at col. 1, lines 50-51.

"...The user may review the full interface definition language of the object, save the IDL or cut-and-paste it to another program such as a code editor for compiling..." at col. 5, lines 32-35.

It would have been obvious to one of ordinary skill at the time of the invention to combine Ku with Knutson to cut and paste physical entities in order to use commonly accepted means of moving and copying information through a graphical user interface and gain greater acceptance from potential users. Knutson and Ku have related applications. They teach the use of computers, the use of databases, the use of networks, the use of pointers, the use of relationships, and the use of entities. Knutson provides data stores, folders, links, relationships, and preferences and Ku provides the cutting and pasting of physical entities.

28. As per claim 29, the "...end-user programs..." is taught by Knutson at col. 6, lines 56-59,  
the "...are manifested as physical entities..." is taught by Ku at col. 1, lines 50-51,  
the "...that end-users can drag, drop..." is taught by Knutson at col. 4, lines 49-50 and col. 21, lines 20-23,  
the "...cut, and paste..." is taught by Ku at col. 5, lines 32-35,  
and the "...within data containers..." is taught by Knutson at col. 12, lines 9-12.

29. Claims 19, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knutson as applied to claims 1 and 18 above respectively, and further in view of Thuraisingham (U.S. Patent No. 5,481,700).

As per claim 19, the "...end-user programs are written..." is taught by Knutson at col. 6, lines 56-59 and col. 41, lines 66-67,  
but the "...using propositional logic..." is not taught by Knutson.

However, Thuraisingham teaches the use of propositional logic as follows:

"...In this section, we develop a propositional logic for multilevel environments..." at col. 4, lines 13-14.

It would have been obvious to one of ordinary skill at the time of the invention to combine Thuraisingham with Knutson to use propositional logic in order to use means of supporting multilevel databases and provide greater system utility for potential users. Knutson and Thuraisingham have related applications. They teach the use of computers, the use of databases, the use of networks, the use of schema, and the use of relationships: Knutson provides data stores, folders, links, relationships, and preferences and Thuraisingham provides propositional logic.

30. As per claim 20, the "...end-user programs are written..." is taught by Knutson at col. 6, lines 56-59 and col. 41, lines 66-67 and the "...utilizing predicate logic..." is taught by Thuraisingham at col. 7, lines 63-65 and col. 4, lines 13-14.

31. As per claim 22, the "...end-user programs are constrained..." is taught by Knutson at col. 6, lines 56-59 and col. 8, lines 65-67 and the "...by a logic schema..." is taught by Thuraisingham at col. 4, lines 13-14 and col. 11, lines 62-65.

32. Claims 30-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knutson et al. (U.S. Patent No. 5,870,746), Watters (U.S. Patent No. 6,490,718), and Saxe (U.S. Patent No. 6,343,376).

31. Knutson renders obvious independent claim 30 by the following: "...writing user preferences..." at col. 13, lines 32-36 and col. 8, lines 11-13.

"...in accordance with a developer schema..." at col. 3, lines 48-53 and col. 7, lines 11-13.

"...executing user preferences in response to an event..." at col. 10, lines 25-26, col. 8, lines 11-13, col. 8, lines 53-54, and col. 44, lines 62-64.

In claim 30, the term "analyst" is used to suggest the term "developer". Knutson does not teach the use of named groups of data and the use of conditionally valid preferences.

32. However, Watters teaches the use of named groups of data as follows:  
"...with respect to one or more named groups of data..." at col. 1, lines 27-30.

It would have been obvious to one of ordinary skill at the time of the invention to combine Watters with Knutson to use named groups of data in order to associate control information with the groups of related data. Knutson and Watters have related applications. They teach the use of computers, the use of data files, the use of networks, and the use of entities. Knutson provides data stores, schema, events, and preferences and Watters provides named groups of data.

Knutson does not teach the use of conditionally valid preferences.

33. However, Saxe teaches the use of conditionally valid preferences as follows:

"...and taking action based a conditionally valid preference..." at col. 10, lines 23-29, col. 1, lines 66-67, col. 2, lines 1-2, and col. 22, lines 36-39.

It would have been obvious to one of ordinary skill at the time of the invention to combine Saxe with Knutson and Watters to use conditionally valid preferences in order

to use context to analyze potential actions upon occurrence of events. Knutson, Watters, and Saxe have related applications. They teach the use of computers and the use of data files and Knutson and Saxe teach the use of databases, the use of links, the use of pointers, the use of relationships and the taking of actions. Knutson provides data stores, schema, events, and preferences, Watters provides named groups of data, and Saxe provides conditionally valid preferences. In claim 30, the term "choice" is used to suggest the term "preference".

34. As per claim 31, the "...events are received from a plurality of event sources..." is taught by Knutson at col. 44, lines 62-64, col. 15, lines 64-66, and col. 30, lines 10-13.

35. As per claim 32, the "...event source..." is taught by Knutson at col. 44, lines 62-64 and col. 30, lines 10-13, the "...is a named group of data..." is taught by Watters at col. 1, lines 27-30, and the "...and the event is a change in the data associated therewith..." is taught by Knutson at col. 44, lines 62-64, col. 31, lines 41-45, and col. 29, lines 56-59.

36. As per claim 33, the "...preference execution comprises translating end-user specified preferences into queries..." is taught by Knutson at col. 40, lines 62-65, col. 6, lines 63-66, col. 62, lines 36-37, col. 8, lines 11-13, and col. 8, lines 41-43 and the "...and executing queries on structured data..." is taught by Knutson at col. 16, lines 32-35 and col. 39, lines 24-26.

37. As per claim 34, the "...named group of data..." is taught by Watters at col. 1, lines 27-30

and the "...can be used as a constant argument to a condition or action..." is taught by Knutson at col. 16, lines 26-28, col. 17, lines 15-18, and col. 22, lines 22-31.

38. As per claim 35, the "...taking action corresponds to including a data file..." is taught by Knutson at col. 22, lines 22-31, col. 36, lines 43-45, and col. 36, lines 30-32

and the "...into a named group of data..." is taught by Watters at col. 1, lines 27-30.

39. As per claim 36, the "...taking action corresponds to excluding a data file..." is taught by Knutson at col. 22, lines 22-31, col. 32, lines 15-17, and col. 36, lines 30-32

and the "...from a named group of data..." is taught by Watters at col. 1, lines 27-30.

40. As per claim 37, the "...computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 32..." is taught by Knutson is Figure 27.

### ***Conclusion***

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (571)-272-4110. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571)-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2167


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Harold E. Dodds, Jr.*

Harold E. Dodds, Jr.

Patent Examiner

March 21, 2005

  
CHARLES ROBINSON  
PATENT EXAMINER